PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P803814/WO/1				FOR FURTHER ACTION		See Form PCT/IPEA	See Form PCT/IPEA/416			
International application No. PCT/EP2004/009946				International filing date 07.09.2004		Priority date (day/mo	•			
International Patent Classification (IPC) or national classification and IPC B23Q37/00, B23Q39/00, B23Q41/06 Applicant										
DAI	MLEI	RCHRYS	LER AG							
1.	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.									
2.	This R	REPORT con	nsists of a total of	5	sheets, incl	uding this cover sheet.				
3.	This re	eport is also	accompanied by A	NNEXES, comprising:						
	a. 🛭	(sent to	o the applicant and	to the International Bure	eau) a total of 2		sheets, as follows:			
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).									
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental									
	ь. 🗌	_	Box. o the International	<i>Bureau only)</i> a total of (i	ndicate type and nu	nmber of electronic carrier(s	s))			
						, containing a seque	nce listing and/or tables			
				r readable form only, as trative Instructions).	indicated in the Su	pplemental Box Relating to	o Sequence Listing (see			
4.	This re			ng to the following items	s:					
	\boxtimes	Box No. I	Basis of the							
		Box No. II		report						
	Ħ	Box No. II	ž	chment of opinion with r	of invention					
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	Box No. IV Lack of unity of invention Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or incitations and explanations supporting such statement						adustrial applicability;			
		Box No. V		uments cited	P seen sememen					
Box No. VI Certain decuments cited Box No. VII Certain defects in the international application										
	Box No. VII Certain detects in the international application Box No. VIII Certain observations on the international application									
Date of submission of the demand			Date of completion of	of this report						
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Name and mailing address of the IPEA/EP					Authorized officer					
Facsimile No.					Геlephone No.					

International application No.
PCT/EP2004/009946

Box	x No. I	[Basis of the report							
1.			d to the language, this report is based on the international report is based on the i	onal application in the language in	n which it was filed, unless otherwise					
			report is based on translations from the original langua h is the language of a translation furnished for the purp							
			international search (Rule 12.3 and 23.1(b))							
			publication of the international application (Rule 12.4	1)						
		Ш	international preliminary examination (Rule 55.2 and	/or 55.3)						
2.	rece	Ith regard to the elements of the international application, this report is based on (<i>replacement sheets which have been furnished to the</i> ceiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to is report):								
		the in	sternational application as originally filed/furnished							
	\boxtimes	the de	escription:							
		pages	1–9		as originally filed/furnished					
		pages	*	received by this Authority on						
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3.	Ш	The a	amendments have resulted in the cancellation of:							
		\vdash	the description, pages							
		님	the claims, nos.							
		닏	the drawings, sheets/figs							
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		Ш	any table(s) related to sequence listing (specify):							
4.			report has been established as if (some of) the amend have been considered to go beyond the disclosure as fi							
		\vdash	the description, pages							
		Ш	the claims, nos.							
		Ш	the drawings, sheets/figs							
			the sequence listing (specify):							
			any table(s) related to sequence listing (specify):							
*	If ite	ет 4 ар	plies, some or all of those sheets may be marked "sup	erseded."						

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YES
_ NO
YES
NO
_ YES
_ NO
_ _ Y

2. Citations and explanations (Rule 70.7)

1) Citations

- D1: PATENT ABSTRACTS OF JAPAN & JP 2001 018102 A
- D2: EP 1 380 382 A (not a prior publication; filing date 07.07.2003; publication date 14.01.2004)
- D3: EP 1 346 788 A
- D4: EP 0 908 269 A

2) Claims 1-2

The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claims 1-2 does not involve an inventive step (PCT Article 33(3)).

D1 is considered the prior art closest to the subject matter of claim 1. It discloses a:

Machining system (transfer machine) for cutting cylinder heads,

- with a plurality of machining stations (A-F) in which the cylinder heads that are to be machined are machined in different orientations
- wherein the cylinder heads to be machined are supplied in sequence to the machining stations (A-F)

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- wherein at least one of the machining stations (A F) comprises a plurality of identical machine tools (12)
- wherein each machine tool comprises a plurality of spindles (145), at least some of which are equipped in a fixed manner with a tool.

The subject matter of claim 1 differs therefore from the known machining system in that

at least some of the spindles are arranged in such a way in the working chamber that the tools fixed thereto simultaneously engage on the cylinder head.

The problem addressed by the present invention can therefore be considered that of reducing machining times.

The solution proposed in claim 1 of the present application cannot be deemed inventive since it is general knowledge to a person skilled in the art that machining times can be reduced by having a plurality of spindles with the corresponding tools engage simultaneously on the workpiece - see, e.g., D3, figure 1 and paragraphs 14, 24 and 34.

The subject matter of claim 2 does not involve an inventive step either, since it is obvious to a person skilled in the art to equip the machine tools of different machining stations with a different number of spindles so as to optimise the productivity of the machining system.

3) Claim 3

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement									
The combination of features contained in dependent claim									
3 is neither known nor obvious from the available prior									
art. In the prior art, the spindles can be moved at least									
along an axis.									